Appendix table 8-18.
General attitudes toward science and technology, by selected characteristics: 1992–99 (selected years)

Characteristic	1992			1995			1997			1999		
	P[a]	R[b]	P/R	P[a]	R[b]	P/R	P[a]	R[b]	P/R	P[a]	R[b]	P/R
						Mean						
All adults	67	38	1.76	68	39	1.74	70	37	1.89	71	38	1.87
Formal education												
Less than high school	64	49	1.31	63	51	1.24	69	45	1.53	67	50	1.34
High school graduate	67	39	1.72	68	39	1.74	69	38	1.82	71	38	1.87
Baccalaureate	70	27	2.59	71	29	2.45	74	28	2.64	74	28	2.64
Graduate/professional	71	24	2.96	73	24	3.04	75	24	3.13	75	26	2.8
Science/mathematics education[c]												
Low	66	43	1.53	67	44	1.52	69	42	1.64	69	44	1.57
Middle	67	38	1.76	69	35	1.97	71	34	2.09	72	35	2.06
High	71	24	2.96	71	28	2.54	75	27	2.78	75	26	2.89
Sex												
Female	67	38	1.76	67	40	1.68	69	39	1.77	69	40	1.73
Male	68	39	1.74	69	38	1.82	71	35	2.03	72	36	2.00
Attentiveness to science and technology[d]												
Attentive public	71	36	1.97	74	30	2.47	75	30	2.50	75	31	2.42
Interested public	70	36	1.94	69	38	1.82	73	35	2.09	73	36	2.03
Residual public	65	41	1.59	65	42	1.55	66	43	1.54	67	43	1.56

P = Promise of Science and Technology; R = Reservations about Science and Technology; P/R = Ratio of Promise Index to Reservation Index

NOTES: The Index of Scientific Promise and the Index of Scientific Reservation are factor scores converted to a 0–100 scale. A confirmatory factor analysis verified the existence of a two factor structure. The lowest possible factor score (strong disagreement with all of the items) was set to 0, and the highest possible factor score (strong agreement with all of the items) was set to 100. All factor scores between the highest and the lowest were placed on the 0–100 metric accordingly.

[a]The Index of Scientific Promise includes responses to the following statements: "Now I would like to read you some statements like those you might find in a newspaper or magazine article. For each statement, please tell me if you generally agree or disagree. If you feel especially strongly about a statement, please tell me that you strongly agree or disagree. First, science and technology are making our lives healthier, easier, and more comfortable—do you strongly agree, agree, disagree, or strongly disagree? Most scientists want to work on things that will make life better for the average person—do you strongly agree, agree, disagree, or strongly disagree? With the application of science and new technology, work will become more interesting—do you strongly agree, agree, disagree, or strongly disagree? Because of science and technology, there will be more opportunities for the next generation—do you strongly agree, agree, disagree, or strongly disagree?"

[b]The Index of Scientific Reservation includes responses to the following statements: "Now I would like to read you some statements like those you might find in a newspaper or magazine article. For each statement, please tell me if you generally agree or disagree. If you feel especially strongly about a statement, please tell me that you strongly agree or strongly disagree. We depend too much on science and not enough on faith—do you strongly agree, agree, disagree, or strongly disagree? It is not important for me to know about science in my daily life—do you strongly agree, agree, disagree, strongly disagree? Science makes our way of life change too fast—do you strongly agree, agree, disagree, strongly disagree? Now for a different type of question. People have frequently noted that scientific research has produced both beneficial and harmful consequences. Would you say that, on balance, the benefits of scientific research have outweighted the harmful results, or have the harmful results of scientific research been greater than its benefits? *(If benefits greater):* Would you say that the balance has been strongly in favor of beneficial results, or only slightly? *(If harms greater):* Would you say that the balance has been strongly in favor of harmful results, or only slightly?"

[c]Respondents were classified as having a "high" level of science/mathematics education if they took nine or more high school and college science/math courses. They were classified as "middle" if they took six to eight such courses, and as "low" if they took five or fewer.

[d]To be classified as attentive to a given policy area, an individual must indicate that he or she is "very interested" in that issue area, report that he or she is "very well informed" about it, and be a regular reader of a daily newspaper or relevant national magazine. Citizens who report that they are "very interested" in an issue area, but who do not think that they are "very well informed" about it, are classified as the "interested public." All other individuals are classified as members of the "residual public" for that issue area. The attentive public for science and technology combines the attentive public for new scientific discoveries and the attentive public for new inventions and technologies. Any individual who is not attentive to either of those issues but who is a member of the interested public for at least one of those issues is classified as a member of the interested public for science and technology. All other individuals are classified as members of the residual public for science and technology.

SOURCES: National Science Foundation, Division of Science Resource Studies (NSF/SRS), *NSF Survey of Public Attitudes Toward and Understanding of Science and Technology, 1999* (and earlier years). For a complete set of data from the survey, see J.D. Miller and L. Kimmel, *Public Attitudes Toward Science and Technology, 1979–1999, Integrated Codebook* (Chicago: International Center for the Advancement of Scientific Literacy, Chicago Academy of Sciences, 1999); and unpublished tabulations.

See page 8-15 in Volume 1.